

**SUBCHAPTER F: USE OF GRAYWATER SYSTEMS**

**§§210.81 - 210.85**

**Effective January 6, 2005**

**§210.81. Applicability.**

(a) This subchapter applies to graywater used for irrigation and other agricultural purposes; for domestic use; for commercial purposes; for industrial purposes; and for institutional purposes.

(b) Reclaimed water use is regulated by Subchapters A - E of this chapter (relating to General Provisions; General Requirements for the Production, Conveyance, and Use of Reclaimed Water; Quality Criteria and Specific Uses for Reclaimed Water; Alternative and Pre-Existing Reclaimed Water Systems; and Special Requirements for Use of Industrial Reclaimed Water).

(c) For the purpose of this subchapter, the term "Site" has the same meaning as defined in Chapter 305, Subchapter A of this title (relating to General Provisions).

Adopted December 15, 2004

Effective January 6, 2005

**§210.82. General Requirements.**

(a) Graywater is defined as wastewater from:

- (1) showers;
- (2) bathtubs;
- (3) handwashing lavatories;
- (4) sinks that are not used for disposal of hazardous or toxic ingredients;
- (5) sinks not used for food preparation or disposal; and
- (6) clothes-washing machines.

(b) Graywater does not include wastewater from the washing of material, including diapers, soiled with human excreta or wastewater that has come into contact with toilet waste.

(c) Construction of a graywater system, including storage and disposal systems, must comply with this chapter and any requirements of the local permitting authority.

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**§210.83. Criteria for the Domestic Use of Graywater.**

(a) An authorization is not required for the domestic use of less than 400 gallons of graywater each day if:

(1) the graywater originates from a private residence;

(2) the graywater system is designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system and the discharge from the graywater system must enter the organized wastewater system through two backwater valves or backwater preventers;

(3) the graywater is stored in tanks and the tanks:

(A) are clearly labeled as nonpotable water;

(B) must restrict access, especially to children;

(C) eliminate habitat for mosquitoes and other vectors;

(D) are able to be cleaned; and

(E) meet the structural requirements of §210.25(i) of this title (relating to Special Design Criteria for Reclaimed Water Systems);

(4) the graywater system uses piping that meets the piping requirement of §210.25 of this title;

(5) the graywater is applied at a rate that:

(A) will not result in ponding or pooling; or

(B) will not cause runoff across the property lines or onto any paved surface;  
and

(6) the graywater is not disposed of using a spray distribution system.

(b) Builders of private residences are encouraged to:

(1) install plumbing in new housing to collect graywater from all allowable sources;  
and

(2) design and install a subsurface graywater system around the foundation of new housing to minimize foundation movement or cracking.

(c) A graywater system as described in subsection (a) of this section may only be used:

(1) around the foundation of new housing to minimize foundation movement or cracking;

(2) for gardening;

(3) for composting; or

(4) for landscaping at the private residence.

(d) The graywater system must not create a nuisance or damage the quality of surface water or groundwater.

(e) Homeowners who have been disposing wastewater from residential clothes-washing machines, otherwise known as laundry graywater, directly onto the ground before the effective date of this rule may continue disposing under the following conditions.

(1) The disposal area must not create a public health nuisance.

(2) Surface ponding must not occur in the disposal area.

(3) The disposal area must support plant growth or be sodded with vegetative cover.

(4) The disposal area must have limited access and use by residents and pets.

(5) Laundry graywater that has been in contact with human or animal waste must not be disposed onto the ground surface.

(6) Laundry graywater must not be disposed to an area where the soil is wet.

(7) A lint trap must be affixed to the end of the discharge line.

(f) Graywater systems that are altered, create a nuisance, or discharge graywater from any source other than clothes-washing machines are not authorized to discharge graywater under subsection (e) of this section.

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**§210.84. Criteria for Use of Graywater for Industrial, Commercial, or Institutional Purposes.**

(a) Authorization. If used in accordance with this subchapter, graywater used for an industrial, commercial, or institutional purpose does not require authorization from the commission.

(b) Graywater systems used for industrial, commercial, or institutional purposes must be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. The discharge from the graywater system must

enter the organized wastewater system through two backwater valves or backwater preventers.

(c) Graywater, as defined in §210.82(a) of this title (relating to General Requirements), may be used for the following activities.

(1) Process water.

(A) Graywater used for industrial, commercial, or institutional purposes must be treated to a standard that allows the graywater to be used in operational processes.

(B) Treatment described in subparagraph (A) of this paragraph does not require an authorization from the agency.

(2) Landscape maintenance. If graywater is used for landscape maintenance, the graywater must meet the following standards.

(A) If the graywater will be applied in areas where the public may come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 20 colony forming units (CFU)/100 milliliters (ml), geometric mean; or

(ii) Fecal coliform (not to exceed), 75 CFU/100 ml, single grab sample.

(B) If the graywater will be applied in areas where the public is not present during the time when irrigation activities occur or disposed of for other uses where the public would not come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 200 CFU/100 ml, geometric mean; or

(ii) Fecal coliform (not to exceed), 800 CFU/100 ml, single grab sample.

(3) Dust control. If graywater is used for dust control, the graywater must meet the standards in paragraph (2)(B) of this subsection.

(4) Toilet flushing. If graywater is used for toilet flushing:

(A) the fecal coliform levels must meet the limits in paragraph (2)(A) of this subsection; and

(B) all exposed piping and piping carrying graywater within a building must be either purple pipe or painted purple; all buried piping installed after the effective date of these rules must be either manufactured in purple, painted purple, taped with purple metallic tape, or bagged in

purple; and all exposed piping must be stenciled in white with a warning reading “NON-POTABLE WATER.”

(5) Other uses. If graywater is used for other similar activities where the potential for unintentional human exposure may occur, the graywater must meet the fecal coliform limits in paragraph (2)(A) of this subsection.

(d) Graywater used for commercial, industrial, or institutional purposes must be monitored for fecal coliform at least monthly in areas where the public may come into contact with graywater and these records must be maintained at the site. These records must be readily available for inspection by the commission for a minimum of five years.

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**§210.85. Criteria for Use of Graywater for Irrigation and for Other Agricultural Purposes.**

(a) If used in accordance with this subchapter, graywater used for irrigation and other agricultural purposes does not require authorization from the commission.

(b) Graywater systems used for irrigation and other agricultural purposes must be designed so that 100% of the graywater can be diverted to an organized wastewater collection system during periods of non-use of the graywater system. The discharge from the graywater system must enter the organized wastewater system through two backwater valves or backwater preventers.

(c) Graywater, as defined in §210.82(a) of this title (relating to General Requirements), may be used for the following activities.

(1) Process water.

(A) Graywater used for irrigation and other agricultural purposes may be treated to a standard that allows the graywater to be used in operational processes.

(B) Treatment described in subparagraph (A) of this paragraph does not require an authorization from the commission.

(2) Landscape maintenance. If graywater is used for landscape maintenance, the graywater must meet the following standards.

(A) If the graywater will be applied in areas where the public may come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 20 colony forming units (CFU)/100 milliliters (ml), geometric mean; or

(ii) Fecal coliform (not to exceed), 75 CFU/100 ml, single grab

sample.

(B) If the graywater will be applied in areas where the public is not present during the time when irrigation activities occur or disposed of for other uses where the public would not come into contact with the graywater, the graywater must meet the following standards:

(i) Fecal coliform, 200 CFU/100 ml, geometric mean; or

(ii) Fecal coliform, 800 CFU/100 ml, single grab sample.

(3) Dust control. If graywater is used for dust control, the graywater must meet the standards in paragraph (2)(B) of this subsection.

(4) Irrigation of fields. If graywater is used to irrigate fields where edible crops are grown or fields that are pastures for milking animals, the graywater must meet the standards in paragraph (2)(A) of this subsection.

(5) Other uses. If graywater is used for other similar activities where the potential for unintentional human exposure may occur, the graywater must meet the fecal coliform limits in paragraph (2)(A) of this subsection.

(d) Graywater used for irrigation and for other agricultural purposes must be monitored for fecal coliform at least monthly in areas where the public may come into contact with graywater and the records must be maintained at the site. These records must be readily available for inspection by the commission for a minimum period of five years.

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